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Assistant Commissioner for Patents Washington, D.C. 20231

## **CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

Attorney Docket No.

SIMTECH.088RAC

**Applicant** 

Mark Moshayedi

For

APPARATUS FOR STACKING

SEMICONDUCTOR CHIPS

Attorney

John R. King

"Express Mail"

Mailing Label No.

EL207478983US

**Date of Deposit** 

February 28, 2000

I hereby certify that the accompanying

Reissue Transmittal Letter in Duplicate; A single-column copy of the specification, claims, and abstract; Duplicates of the printed drawings of the issued patent; Preliminary Amendment in 4 pages; Copy of Reissue Application Declaration; Copy of Supplemental Reissue Application Declaration; Second Supplemental Reissue Application Declaration; Copy of Power of Attorney by Assignee; Copy of small entity declaration from prior application; Copy of Offer to Surrender and Assent of Assignee to Reissue; Reissue Application Fee Determination Record; Check for Filing Fee; Return prepaid postcard.

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the sistant Commissioner for Patents, Washington, D.C. 20231.

> Donald I King

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02-29-00



PATENT

A

Case Docket No. SIMTECH.088RAC

Date: February 28, 2000

Page 1

# ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

Sir:

Transmitted herewith for filing is the continuation application of reissue application of

Inventor:

Mark Moshayedi

For:

APPARATUS FOR STACKING SEMICONDUCTOR CHIPS

## Enclosed are:

- (X) A single-column copy of the specification, claims, and abstract.
- (X) Informal/formal duplicates of the printed drawings of the issued patent.
- (X) Preliminary Amendment in 4 pages.
- (X) Copy of Reissue Application Declaration.
- (X) Copy of Supplemental Reissue Application Declaration.
- (X) Second Supplemental Reissue Application Declaration.
- (X) Copy of Power of Attorney by Assignee.
- (X) Copy of small entity declaration from prior application.
- (X) Copy of Offer to Surrender and Assent of Assignee to Reissue.
- (X) Reissue Application Fee Determination Record.
- (X) Return prepaid postcard.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, now or in the future, or credit any overpayment to Account No. 11-1410. A duplicate copy of this sheet is enclosed.
- (X) A check in the amount of \$345 to cover the filing fee is enclosed.

John R. King

Registration No. 34,362

Attorney of Record





Date: February 28, 2000

# REISSUE APPLICATION FEE DETERMINATION RECORD

	CLAIMS AS FILED - PART I				
	CLAIMS IN PATENT	NUMBER FILED IN REISSUE APPLICATION	NUMBER EXTRA	RATE	FEE
BASIC FEE					\$345
TOTAL CLAIMS	15	6	0	\$9	\$0
INDEP. CLAIMS	2	1	0	\$39	\$0
		TOTAL FILING FEE			\$0

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<b>39</b>	

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 11-1410. A duplicate copy of this sheet is enclosed.

<sub>2</sub>(X)

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Return prepaid postcard.

John R. King

Registration No. 34,362 Attorney of Record

H:\DOCS\JRK\JRK-2953.DOC:sb 022800 SIMTECH.088RAC PATENT

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Mark Moshayedi	)
Assignee	:	SIMPLE TECHNOLOGY INCORPORATED	)
Reissue of Patent No.	:	5,514,907	)
Issued	:	May 7, 1996	)
For	:	APPARATUS FOR STACKING SEMICONDUCTOR CHIPS	)

# SECOND SUPPLEMENTAL REISSUE APPLICATION DECLARATION

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

I, as a named inventor, declare as follows:

- 1. I believe I am an original, first and sole inventor of the subject matter described and claimed in Application Serial No. 09/064,348, which is a reissue application of U.S. Patent No. 5,514,907 ("the '907 patent"), now surrendered. I also believe I am an original, first and sole inventor of the subject matter described and claimed in the accompanying application, which is a continuation of co-pending Application Serial No. 09/064,348, and which is being amended by the accompanying Preliminary Amendment filed on even date herewith.
- 2. I hereby state that I have reviewed and understand the contents of the above identified application, including the specification and claims, as amended by any amendments referred to above.

-1-

. P. . . .

Reissue of Patent No.: 5 **Issued:** May 7, 1996

3. Every error in the patent which is being corrected by the present reissue application, and which is not covered by the prior declarations, arose without any deceptive intention on the part of the applicant.

I have read and understand the foregoing statements of this Declaration. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or patent issuing therefrom.

Dated: 9-27-00

By: Mark Moshayedi

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SIMTECH.088RA PATENT

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Mark Moshayedi	)	
Assignee	:	SIMPLE TECHNOLOGY INCORPORATED	)	C
Reissue of Patent No.	:	5,514,907	)	
Issued	:	May 7, 1996	)	
For	:	APPARATUS FOR STACKING SEMICONDUCTOR CHIPS	)	

# SUPPLEMENTAL REISSUE APPLICATION DECLARATION

Assistant Commissioner for Patents Washington, D.C. 20231

# Dear Sir:

I, as a named inventor, declare as follows:

- 1. I believe I am an original, first and sole inventor of the subject matter described and claimed in U.S. Patent No. 5,514,907 ("the '907 patent"), issued May 7, 1996, for which reissue is being sought.
- 2. I also believe I am the original, first and sole inventor of the subject matter which is claimed and for which a reissue patent is sought on the invention entitled APPARATUS FOR STACKING SEMICONDUCTOR CHIPS; the specification of which was filed on April 22, 1998 as Application Serial No. 09/064,348; which amended the '907 patent to include additional claims; and which is being amended by the accompanying Amendment filed on even date herewith.

Reissue of Patent No.: ,96

Issued: May 7, 1996

3. I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendments referred to above.

4. Every error in the patent which is being corrected by the present reissue application, and which is not covered by the prior declaration, arose without any deceptive intention on the part of the applicant.

I have read and understand the foregoing statements of this Declaration. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or patent issuing therefrom.

Dated:	6/25/99	By: MAN	
_		Mark Moshayedi	

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SIMTECH.088RA PATENT

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Mark Moshayedi	
Assignee	:	SIMPLE TECHNOLOGY INCORPORATED	
Reissue of			)
Patent No.	:	5,514,907	)
Issued	:	May 7, 1996	)
For	:	APPARATUS FOR STACKING SEMICONDUCTOR CHIPS	

# REISSUE APPLICATION DECLARATION

Assistant Commissioner for Patents Washington, D.C. 20231

# Dear Sir:

I, as a named inventor, declare as follows:

- I am a citizen of the United States. My residence and post office address are 2019
   Hillside Drive, Orange, California 92669.
- 2. I believe that I am an original, first and sole inventor of the subject matter described and claimed in U.S. Patent No. 5,514,907 ("the '907 patent"), issued May 7, 1996, and of the subject matter disclosed and claimed in the accompanying reissue application.
- 3. I have reviewed and understand the contents of the specification of the accompanying reissue application.

Reissue of Patent No.: 5,514,907

**Issued:** May 7, 1996

4. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56. In compliance with this duty and in accordance with 37 CFR 1.97-1.98, an

Information Disclosure Statement is being submitted with the reissue application.

less that I had a right to claim. Specifically, the insufficiency in the claims resides in the failure to

On information and belief, U.S. Patent No. 5,514,907 is partially inoperable by claiming

present claims directed to a set of support structures including a plurality of surface mount contacts

and a plurality of juxtaposed standard surface mount chips extending between the support

structures and arranged with planar surfaces of adjacent chips positioned face to face. The new

claims presented in the reissue application are directed to this feature, while the original claims of the

'907 patent are not.

5.

6. Turning from the unclaimed subject matter at large to a specific reissue claim, the reissue

application includes one new independent claim: Claim 16. The newly claimed subject matter of

Claim16 is best understood by a comparison with original Claim 7 of the '907 patent. Presented below

is a mock claim which illustrates the claim language common to Claims 7 and 16 in plain type, the

claim language specific to Claim 7 in bracketed type, and the claim language specific to Claim 16 in

underlined type:

A [module that includes at least one] multi-chip module[, said module] comprising:

[a circuit board having at least first and second sets of surface mount pads,]

[a first planar side board] first and second support structures, each support

structure including a plurality of electrically conductive paths and a plurality of

surface mount contacts positioned along an edge thereof, the plurality of surface

Reissue of Patent No.: 5,514,907

**Issued:** May 7, 1996

mount contacts arranged to align with corresponding surface mount pads on a printed circuit board to electrically couple the first and second support structures to the printed circuit board [of said first side board which abuts said circuit board, said plurality of surface mount contacts of said first side board being surface-mounted to said first set of surface mount pads of said circuit board such that said first side board is substantially perpendicular to said circuit board];

[a second planar side board including a plurality of surface mount contacts positioned along an edge of said second side board which abuts said circuit board, said plurality of surface mount contacts of said second side board being surface-mounted to said second set of surface mount pads of said circuit board such that said second side board is substantially perpendicular to said circuit board and substantially parallel to said first side board;] and

[a plurality of] at least first and second juxtaposed standard surface mount chips, each chip having planar surfaces extending between at least a pair of sides of the chip, the planar surfaces arranged generally between the support structures with the planar surfaces of adjacent chips positioned face to face, [stacked between said side boards,] each side of each chip including a plurality of pins[, a portion of each pin] extending toward one of the support structures beyond the side, [a chip surface which lies generally parallel to said circuit board with said chip positioned between said side boards, each chip of said plurality conductively connected to said first side board and said second side board] at least some of the pins being electrically connected to one of the support structures.

The above illustration clearly identifies the differences in the claimed subject matter and evidences the difference in scope between Claim 7 and reissue Claim 16. No original claim has a scope equal to that defined by reissue Claim 16.

Reissue of Patent No.: 5,514,907

**Issued:** May 7, 1996

7. On information and belief, all errors being corrected in the reissue application arose

without any deceptive intent on the part of the Applicant.

I have read and understand the foregoing statements of this Declaration. I declare that all

statements made herein of my own knowledge are true and that all statements made on information and

belief are believed to be true; and further that these statements were made with the knowledge that

willful, false statements and the like so made are punishable by fine or imprisonment, or both, under

Section 1001 of Title 18 of the United States Code and that such willful, false statements may

jeopardize the validity of the application or patent issuing therefrom.

Dated:  $\frac{9-20-98}{}$ 

Mark Moshavedi